Reply to February 4, 2009 Office Action Page 2

> RECEIVED CENTRAL FAX CENTER

AMENDMENTS TO THE CLAIMS

MAY 0 4 2009

Please amend the claims as follows:

1-39. (Canceled)

40. (Currently Amended) A broadcasting service system for receiving television broadcasts and providing them directly to a mobile cellular network transmitting means and via that transmitting means to a mobile telephony terminal, comprising:

a broadcast television receiver means for receiving a broadcast television signal;

a converting means for converting a the received broadcast television signal into a video and audio signal in a format compatible with a signal and transmission standard of the mobile cellular telephone network and for providing the converted format video and audio signal directly to the mobile cellular network transmitting means; and

wherein the mobile cellular network transmitting means is adapted to transmit the thusly converted video and audio signal to a mobile cellular telephone network subscriber via a transmission channel of the mobile cellular telephone network.

wherein the transmitting and converting means transmits data through a connected transmission channel between a mobile telephone subscriber terminal and a base station of the mobile cellular telephone network.

41. (Previously Presented) The broadcasting service system according to claim 40, wherein the television broadcast signal complies with a first signal standard for television broadcasting, the converted digital video and audio signal formats compatible with the mobile

Reply to February 4, 2009 Office Action Page 3

cellular telephone network comply with a second signal standard, and the first and second signal standards agree with a signal standard which is capable of converting between different transmission systems.

- 42. (Previously Presented) The broadcasting service system according to claim 41, wherein the first signal standard is the MPEG-2 (Moving Picture Experts Group 2) standard, and the second signal standard is one of the MPEG-4 (Moving Picture Experts Group 4), H.26L, H.263, and H.26X standards.
- 43. (Previously Presented) The broadcasting service system according to claim 40, wherein the converting means comprises a transcoder which includes a decoding means which decodes digital video and audio data complying with a digital television broadcasting standard and then encodes the thusly decoded video and audio data into a format compatible with transmission over a communication channel of the mobile cellular telephone network, and a converting-controlling means which controls an encoding rate of the transcoder to comply with a transmission rate of the mobile cellular telephone network.
- 44. (Previously Presented) The broadcasting service system according to claim 40, wherein the converting means includes a digital signal converting means which converts an analog television broadcast signal into digital video and audio data, an encoding means which formats the thusly converted digital video and audio data and encodes it for compatibility with the transmission standard of the mobile cellular telephone network, and a converting-controlling means which controls an encoded data rate of the encoding means in order to agree with a transmission rate of the

Reply to February 4, 2009 Office Action Page 4

mobile cellular telephone network.

45. (Previously Presented) The broadcasting service system according to claim 44, wherein the transmitting means includes a means for putting the formatted digital video and audio signal onto the transmission channel of the mobile cellular telephone network, and a formatting-transmission means which formats and transmits the digital video and audio data with additional broadcasting information.

46. (Previously Presented) The broadcasting service system according to claim 45, wherein EPG (Electronic Program Guide) data is formatted and transmitted with the video and audio data and additional information.

47. (Canceled)

48-53. (Canceled)

54. (Canceled)

55. (Previously Presented) A broadcasting service system using a mobile cellular telephony terminal, comprising:

a digital video and audio input means which is provided a digital video and audio signal from a provider;

a transcoding means which converts the provided digital video and audio signal inputted

Reply to February 4, 2009 Office Action Page 5

from the digital video and audio input means into a format and transmission rate compatible with transmission over a transmission channel of the mobile cellular telephone network and provides the converted format video and audio signal directly to an allocating transmitting means;

an encoding-converting means for encoding digital data converted by the transcoding means; a transmitting means which transmits the thusly transcoded-converted digital broadcasting signal provided directly to the allocating transmitting means on an allotted channel of the mobile cellular telephone network;

an EPG (Electronic Program Guide) data converting means for converting EPG data for selecting a digital television broadcasting channel into a format compatible with transmission over the mobile cellular telephone network; and

an additional information converting means for converting the additional information of the digital television broadcasting channel into a format compatible with transmission over the mobile cellular telephone network.

- 56. (Previously Presented) The broadcasting service system according to claim 55, wherein the broadcasting service system transmits the EPG (Electronic Program Guide) data and additional information in compatible formats for the mobile cellular telephone network.
- 57. (Previously Presented) The broadcasting service system according to claim 55, wherein the EPG (Electronic Program Guide) data converting means comprises:
- a decoding means for decoding an inputted EPG (Electronic Program Guide) data stream of a digital television broadcasting signal;
 - a restoring means for restoring the EPG data of the decoded data stream;

Reply to February 4, 2009 Office Action Page 6

a database means which stores information corresponding to the restored EPG data;

an EPG information outputting means for outputting EPG information from the database means corresponding to a mobile cellular telephone network subscriber request; and

a converting means for converting the additional information of the digital television broadcasting signal into a format compatible with transmission via the mobile cellular telephone network.

58. (Previously Presented) A broadcasting service system for enabling the reception of television broadcasts by a mobile cellular telephone subscriber terminal, comprising:

a digital signal processing means for receiving a digital television broadcasting signal and providing a television broadcasting program to a mobile cellular telephone network;

a medium storing means for storing broadcast information processed by the digital signal processing means;

a data processing and converting means for converting EPG (Electronic Program Guide) data and additional information of the digital television broadcasting signal processed by the digital signal processing means into a signal format compatible with transmission via the mobile cellular telephone network; and

a transcoder and transmission means for receiving video and audio data and additional information processed by the digital signal processing means, converting them into a signal format compatible with transmission over the mobile cellular telephone network and transmitting the thusly converted data and information over a transmission channel of the mobile cellular telephone network.

Reply to February 4, 2009 Office Action Page 7

- 59. (Previously Presented) The broadcasting service system according to claim 58, wherein the digital signal processing means comprises:
- a tuner for selecting a digital television broadcasting signal carried on a transmission medium;
 - a demodulating means for restoring the selected digital television broadcasting signal;
- a demultiplexer for fetching EPG (Electronic Program Guide) and additional information from the demodulated digital television broadcasting signal; and
- a decoder for decoding the video and audio data from the demodulated digital television broadcasting signal.
- 60. (Previously Presented) The broadcasting service system according to claim 58, wherein the data processing and converting means comprises:
- an EPG (Electronic Program Guide) data decoding means for decoding EPG (Electronic Program Guide) data of the digital television broadcasting signal;
- a signal converting means for converting the decoded EPG data into a signal format compatible with transmission over the mobile cellular telephone network;
- a protocol converting means for converting the converted EPG data into a protocol compatible with the mobile cellular telephone network;
- a decoding means for decoding the additional information of the digital television broadcasting signal;
- an additional information signal converting means for converting the decoded additional information into a format compatible with transmission over the mobile cellular telephone network;

Reply to February 4, 2009 Office Action Page 8

and

an additional information protocol converting means for converting the converted additional information into a protocol compatible with the mobile cellular telephone network.

61. (Previously Presented) The broadcasting service system according to claim 58, wherein the transcoder and transmission means comprises:

a transcoder for transcoding video and audio data of a digital television broadcasting signal into a format compatible with transmission over a transmission channel of the mobile cellular telephone network;

a transmission rate control means for controlling a transmission rate of the transcoder to comply with the transmission channel of the mobile cellular telephone network;

a converting means for converting the output of the data processing and converting means into a data protocol agreeable to the mobile cellular telephone network;

a synchronization processing means for synchronizing synchronization request information during the transcoding and protocol converting operations; and

a transmitting means for transmitting the processed data in real time by allotting it a transmission channel of the mobile cellular telephone network.

62-79. (Canceled)